Agent-based model of heterogeneous T cell activation *in vitro*

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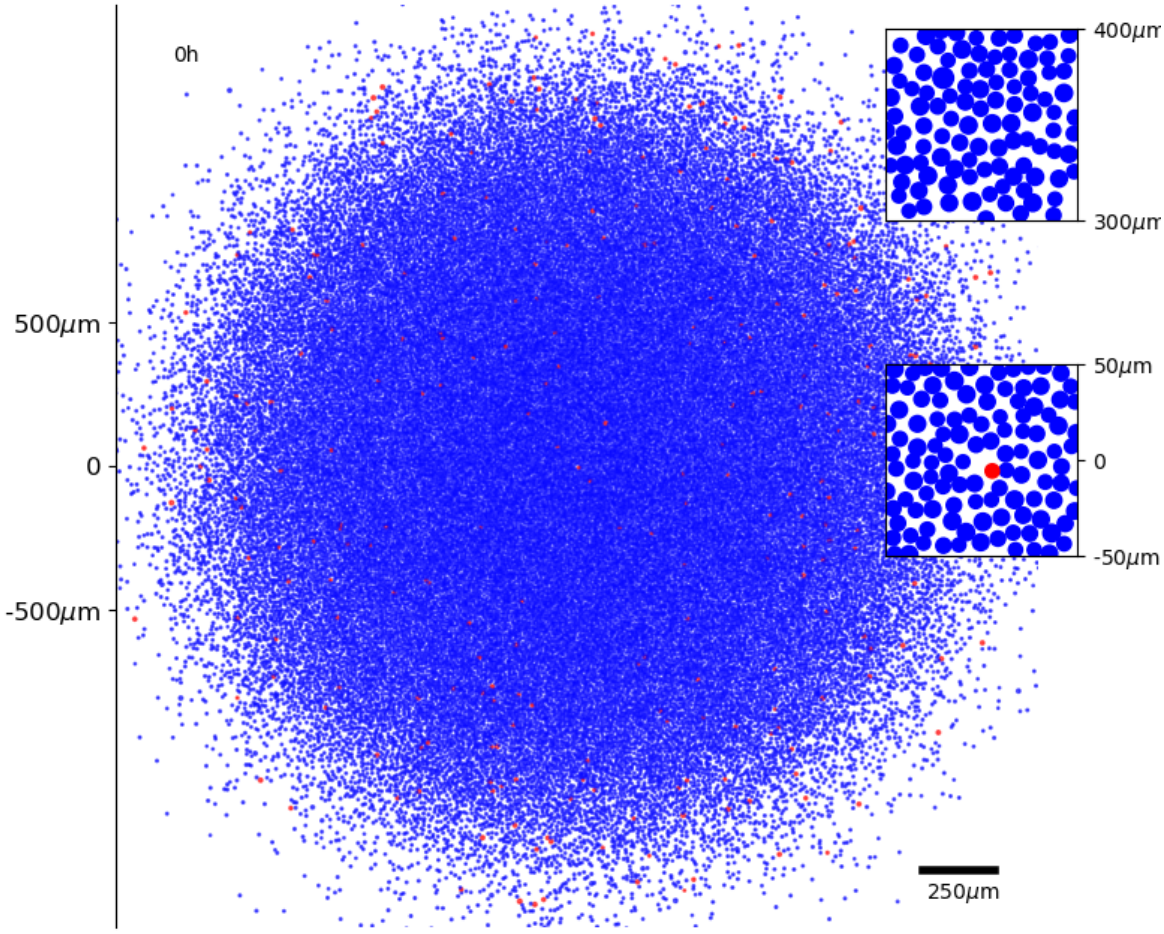
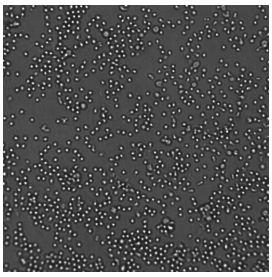
In silico. Whole well, 0-24 hours.



In vitro, 512μm $\times$ 512μm. 24 hours.



Top: a cohort of cells in one well *in silico*. There are 50000 cells at 0h. The 100μm$\times$100μm insets zoom in to the centre of the well and close to the edge. Activated cells are larger than resting cells. Red cells are producing IL-2; grey cells are dead. The death rate is $\mu = 0.008\text{hour}^{-1}$ and the strength-of-signal parameter $\gamma = 0.2$. Bottom: photos from one well of an *in vitro* experiment, P+I high stimulus. Images were taken every half hour for 24 hours.